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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,956	10/15/2004	John E. Dinger	RSW920040065US-09	5955
44870	7590	03/03/2008	EXAMINER	
MOORE & VAN ALLEN, PLLC For IBM			REYES, MARIELA D	
P.O. Box 13706			ART UNIT	PAPER NUMBER
Research Triangle Park, NC 27709			2167	
			MAIL DATE	DELIVERY MODE
			03/03/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/711,956

Applicant(s)

DINGER ET AL.

Examiner

Mariela D. Reyes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 6<sup>th</sup>, 2007 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 13, 18, 23 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Short et al (US Patent 6,178,529).

With respect to independent claim 1, Short teaches:

**A method to automatically define resources forming an IT service,  
comprising:**

**Tracking resources that have been utilized in responding to a request or set of requests or performing a transaction or a set of transactions; and  
automatically defining resources that form an IT service by aggregating all**

**resources utilized to respond to all requests or to perform all transactions.**

(Column 4 Lines 43-54, discloses an application program interface (API) that will manage the resources needed for execution of said application and will create a cluster to which said resources are going to be added. The API will need to track the needed resources before being able to add them to the cluster)

With respect to claim 2, Short teaches:

**Adding any new resources utilized to a resource list.** (Column 4 Lines 52-53, discloses adding new resources to the cluster)

With respect to independent claim 13, Short teaches:

**A method to automatically define resources forming an IT service, comprising:**

**Examining each instance of a request or transaction; and maintaining a record of a union of all resources that have been utilized in responding to each instance of a request or to each instance transaction over a selected time period or on a rolling time period basis.** (Column 5 Lines 23-36, discloses a database that stores information of the resources in each cluster, configuration of the resources and relationship of this resources and that this information will be updated every certain amount of time or when a change is made to said cluster or a related cluster)

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With respect to independent claim 18, Short teaches:

**A system that automatically defines resources forming an IT service,  
comprising:**

**A processor; and a resource utilization program operable on the processor,  
wherein the resource utilization program includes computer executable  
instructions to maintain a record of a union of all resources that have been  
utilized in responding to each instance of a request or to each instance of a  
transaction over a selected time period or on a rolling time period basis. (Column  
5 Lines 23-36, discloses a database that stores information of the resources in each  
cluster, configuration of the resources and relationship of this resources and that this  
information will be updated every certain amount of time or when a change is made to  
said cluster or a related cluster)**

With respect to independent claim 23, Short teaches:

**A method of making a system that automatically defines resources forming  
an IT service, comprising:**

**Providing a processor; and providing a resource utilization program  
operable on the processor, wherein the resource utilization program includes  
computer executable instructions to maintain a record of a union of all resources  
that have been utilized in responding to each instance of a request or to each  
instance of a transaction over a selected time period or on a rolling time period**

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**basis.** (Column 5 Lines 23-36, discloses a database that stores information of the resources in each cluster, configuration of the resources and relationship of this resources and that this information will be updated every certain amount of time or when a change is made to said cluster or a related cluster)

With respect to independent claim 28, Short teaches:

**A computer-readable medium having computer-executable instructions for performing a method, comprising:**

**Tracking resources utilized in responding to a request or set of requests or performing a transaction or a set of transactions; and automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions.** (Column 4 Lines 43-54, discloses an application program interface (API) that will manage the resources needed for execution of said application and will create a cluster to which said resources are going to be added. The API will need to track the needed resources before being able to add them to the cluster)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Short et al (US Patent 6,178,529) in view of Lawlor et al (US Patent 6,038,677).

With respect to claim 3:

Short does not appear to explicitly disclose **removing any resource from the resource list in response to the resource not being utilized for a predetermined time duration.**

Lawlor teaches:

**Removing any resource from the resource list in response to the resource not being utilized for a predetermined time duration.** (Column 5 Lines 10-13, discloses that the constraints for adding a resource to a resource group are based on performance, therefore if the resource is not being utilized it would be removed from the resource group)

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of the cited references to implement **removing any resource from the resource list in response to the resource not being utilized for a predetermined time duration** because this would permit the resource group be current and resources that aren't being used won't be included in said resource group.

Claims 4-12, 14-17, 19-22, 24-27 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short (US Patent 6,178,529) in view of Stone et al (US Patent 7,069,558).

With respect to claim 4:

Short doesn't appear to explicitly disclose **determining a percentage of utilization of each resource across all requests or transactions.**

Stone teaches **determining a percentage of utilization of each resource across all requests or transactions.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

It would be obvious for someone with ordinary skill in the art at the time of the invention to combine the teachings of the cited references to implement **determining a percentage of utilization of each resource across all requests or transactions** because this allows for controlling the execution of applications on said resource.

With respect to claim 5:

Short doesn't appear to explicitly disclose **automatically assigning a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **automatically assigning a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 6:

Short doesn't appear to explicitly disclose **presenting a resource list and an associated priority for each resource to a user or requestor.**



Stone teaches **presenting a resource list and an associated priority for each resource to a user or requestor**. (Fig. 6, discloses presenting a list with the resources and their usage percentage)

With respect to claim 7:

Short doesn't appear to explicitly disclose **adjusting a status propagation logic based on the priority assigned to each resource**.

Stone teaches **adjusting a status propagation logic based on the priority assigned to each resource**. (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 8:

Short doesn't appear to explicitly disclose **presenting a resource utilization diagram to a user or requestor**.

Stone teaches **presenting a resource utilization diagram to a user or requestor**. (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 9:

Short doesn't appear to explicitly disclose **representing a percentage of utilization of each resource in the resource utilization diagram**.

Stone teaches **representing a percentage of utilization of each resource in the resource utilization diagram.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 10:

Short doesn't appear to explicitly disclose **representing a priority of each resource in the resource utilization diagram, wherein the priority is automatically assigned according to the percentage of utilization of the resource.**

Stone teaches **representing a priority of each resource in the resource utilization diagram, wherein the priority is automatically assigned according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 11:

Short doesn't appear to explicitly disclose **representing a quantity of occurrences of each segment linking resources in the resource utilization diagram.**

Stone teaches **representing a quantity of occurrences of each segment linking resources in the resource utilization diagram.** (Fig. 11, discloses presenting the percentage of usage of each resource)

With respect to claim 12:

Short doesn't appear to explicitly disclose **representing a time duration since each resource was last utilized in the resource utilization diagram.**

Stone teaches **representing a time duration since each resource was last utilized in the resource utilization diagram.** (Fig. 11, discloses teaching the time duration of each resource in the application)

With respect to claim 14:

Short doesn't appear to explicitly disclose **determining a percentage of utilization of each resource across all requests or transactions.**

Stone teaches **determining a percentage of utilization of each resource across all requests or transactions.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 15:

Short doesn't appear to explicitly disclose **automatically assigning a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **automatically assigning a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 16:

Short doesn't appear to explicitly disclose **adjusting a status propagation logic based on the priority assigned to each resource.**

Stone teaches **adjusting a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 17:

Short doesn't appear to explicitly disclose **presenting a resource utilization diagram to a user or requestor.**

Stone teaches **presenting a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 19:

Short doesn't appear to explicitly disclose **the resource utilization program comprises computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.**

With respect to claim 20:

Short doesn't appear to explicitly disclose **the resource utilization program comprises computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **the resource utilization program comprises computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 21:

Short doesn't appear to explicitly disclose **the resource utilization program comprises computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.**

Stone teaches **the resource utilization program comprises computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 22:

Short doesn't appear to explicitly disclose **the resource utilization program comprises executable instruction to present a resource utilization diagram to a user or requestor.**

Stone teaches **the resource utilization program comprises executable instruction to present a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 24:

Short doesn't appear to explicitly disclose **providing computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.**

Stone teaches **providing computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 25:

Short doesn't appear to explicitly disclose **providing computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **providing computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 26:

Short doesn't appear to explicitly disclose **providing computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.**

Stone teaches **providing computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource:** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 27:

Short doesn't appear to explicitly disclose **providing computer executable instructions to present a resource utilization diagram to a user or requestor.**

Stone teaches **providing computer executable instructions to present a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 29:

Short doesn't appear to explicitly disclose **automatically assigning a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **automatically assigning a priority to each resource according to the percentage of utilization of the resource.** (Column 6 Lines 45-55, discloses

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determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 30:

Short doesn't appear to explicitly disclose **presenting a resource list and an associated priority for each resource to a user or requestor.**

Stone teaches **presenting a resource list and an associated priority for each resource to a user or requestor.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 31:

Short doesn't appear to explicitly disclose **adjusting a status propagation logic based on the priority assigned to each resource.**

Stone teaches **adjusting a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 32:

Short doesn't appear to explicitly disclose **presenting a resource utilization diagram to a user or requestor.**



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Stone teaches **presenting a resource utilization diagram to a user or requestor**. (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

### ***Response to Arguments***

#### ***Claim Rejections 35 USC 102***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariela D. Reyes whose telephone number is (571) 270-1006. The examiner can normally be reached on M - F 7:30- 5:00 East time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR Feb 28, 08

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JOHN COTTINGHAM  
JULY 2007 PATENT EXAMINER  
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